

REMARKS

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.116 and in light of the remarks which follow, are respectfully requested.

By the above amendments, claim 15 has been amended to recite that the composition comprises from 5 to 15% by weight of compound F1; from 2 to 10% by weight of compound F2; from 1 to 10% by weight of compound F3, with respect to the total weight of the composition. Support for such amendments can be found in the instant specification at least at page 3, line 28 to page 4, line 3. Entry of the foregoing amendments is proper at least because such amendments are effective to place the application in condition for allowance. See M.P.E.P. §714.12.

In the Official Action, claims 15, 20-26 and 28-32 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,255,371 (*Schlosser et al*) in view of U.S. Patent Application Publication No. 2001/0008913 (*Flippo et al*). Claim 27 stands rejected under 35 U.S.C. §103(a) as being obvious over *Schlosser et al* in view of *Flippo et al*, and in view of U.S. Patent No. 6,433,045 (*Hanabusa et al*). Withdrawal of the above rejections is respectfully requested for at least the following reasons.

Independent claim 15 is directed to a composition based on a thermoplastic matrix comprising a flame-retardant system. As noted above, such claim has been amended to recite that the composition comprises from 5 to 15% by weight of compound F1; from 2 to 10% by weight of compound F2; from 1 to 10% by weight of compound F3, with respect to the total weight of the composition.

In the "Response to Arguments" section at page 3 of the Official Action, the Examiner has noted that "[*Flippo et al*] is used as [a] teaching reference, and therefore,

it is not necessary for this secondary reference to contain all the features of the presently claimed invention." Respectfully, it appears that the Examiner has misconstrued Applicants' previous comments. Applicants are not merely arguing that *Flippo et al* fails to disclose or suggest each and every feature of the claimed composition. Rather, Applicants have explained that upon fair consideration of the disclosure of *Flippo et al*, when taken as a whole, it would not have been obvious to the ordinarily skilled artisan to combine *Flippo et al* with *Schlosser et al* in the manner suggested by the Patent Office.

It is well established that when attempting to combine prior art documents, the Patent Office must consider each prior art document in its entirety, i.e., as a whole. See M.P.E.P. §2141.03(VI). Here, the Examiner has relied on *Flippo et al*'s disclosure of a certain amount of melam employed in a flame retardant composition. Applicants respectfully but strenuously submit that *Flippo et al* sets forth additional disclosures and teachings that are highly relevant to the question of combinability. Fair consideration by the Patent Office of such disclosures and teachings of *Flippo et al* is in order, and such action is respectfully requested.

In this regard, *Flippo et al* relates to a flame retardant polyamide composition that contains a triazine compound as a flame retardant, and teaches that the requirements of the flame retardant are **completely fulfilled** if the triazine compound as flame retardant is melam. See paragraphs [0001] and [0004]. *Flippo et al* is concerned with a composition that employs melam as the primary flame retardant, and does not contemplate the use of "more complicated melamine compounds and melamine salts" therewith. See paragraph [0001]. **Thus, *Flippo et al* distinguishes**

its composition from other compositions which employ such "more complicated melamine compounds and melamine salts".

By comparison, the composition of *Schlosser et al* employs various flame retardants including the phosphinate/diphosphinate or polymer thereof of component A and the component B, which is composed of "condensation products of melamine and/or reaction products of melamine with phosphoric acid and/or reaction products of condensation products of melamine with phosphoric acid and/or...a mixture of these." See col. 1, line 46 to col. 2, line 12. The ordinarily skilled artisan would therefore have recognized that the ranges of melam content disclosed by *Flippo et al* cannot simply be superimposed over the *Schlosser et al* disclosure. **Such ranges of melam are meaningful to the specific type of composition taught by *Flippo et al* in which melam is the primary flame retardant, not the *Schlosser et al* composition which employs a combination of various flame retardants.**

Flippo et al and *Schlosser et al* teach fundamentally different approaches for providing flame retardant characteristics to a polymer. While *Flippo et al* focuses on the use of melam apart from more complicated melamine compounds and melamine salts, *Schlosser et al* teaches the use of phosphinate/diphosphinate or a polymer thereof and the various permutations of condensation products mentioned above. The ordinarily skilled artisan would have recognized that the complicated condensation reaction products of *Schlosser et al* are compounds of the type that *Flippo et al* wishes to avoid or at least deems unnecessary. As such, upon fair consideration of the *Schlosser et al* and *Flippo et al* disclosures in their entirety, it would not have been obvious to the ordinarily skilled artisan to modify *Schlosser et al* in the manner proposed in the Official Action.

For at least the above reasons, Applicants respectfully but strenuously submit that it would not have been obvious to combine *Schlosser et al* and *Flippo et al* in the manner suggested by the Patent Office.

Hanabusa et al fails to cure the previously-described deficiencies of *Schlosser et al*. In this regard, *Hanabusa et al* has been relied on by the Patent Office for disclosing a fire retardant composition comprising specific inorganic fillers. See Official Action dated October 29, 2008, at page 6. However, like *Schlosser et al*, *Hanabusa et al* does not disclose or suggest a composition comprising compounds F1 and F2, as well as from 1 to 10% by weight of compound F3, as recited in claim 15.

In order to expedite prosecution, by the above amendments, independent claim 15 has been further amended to recite that the composition comprises from 5 to 15% by weight of compound F1; from 2 to 10% by weight of compound F2; from 1 to 10% by weight of compound F3, with respect to the total weight of the composition. Such composition comprising the claimed amounts of compounds F1, F2 and F3 is not exemplified by any of the applied documents.

Accordingly, for at least the above reasons, withdrawal of the above §103(a) rejections is respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.


If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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By:



A handwritten signature in black ink, appearing to read 'Roger H. Lee', is written over a horizontal line.

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